Check List 8(4): 712–717, 2012
© 2012 Check List and Authors
ISSN 1809-127X (available at *www.checklist.org.br*)

Check List
Journal of species lists and distribution

LISTS OF SPECIES

Checklist of large and medium-sized mammals of the Estação Ecológica Mata do Cedro, an Atlantic forest remnant of central Minas Gerais, Brazil

Gabriel Penido [1*] and Antônio Carlos da Silva Zanzini [2]

1 Universidade de Brasília, Instituto de Biologia, Laboratório de Mamíferos. Campus Universitário Darcy Ribeiro. CEP 70910-900. Brasília, DF. Brazil.
2 Universidade Federal de Lavras/UFLA, Departamento de Ciências Florestais. Cx. Postal 3037. CEP 37200-000. Lavras, MG, Brazil.
* Corresponding author. E-mail: *gpdoliveira@yahoo.com.br*

ABSTRACT: This study presents a checklist of large and medium size mammals at Estação Ecológica Mata do Cedro, municipality of Carmópolis de Minas, Minas Gerais, Brazil. Between June 2008 and February 2009 we applied sand plots, active search and camera traps for the species inventory. Sand plots were inspected for five consecutive days every two months. We registered 21 species of mammals: 14 on sand plots, 13 by the active search (direct and indirect evidence) and four in the camera traps. Most species were common to other studies in the Atlantic forest, and not listed as threatened on the Brazilian red list, but two (*Puma concolor* and *Myrmecophaga tridactyla*) are considered vulnerable to extinction in Brazil. The reserve holds high species richness in relation to other studies and may have an important role in the conservation of the Atlantic forest mammals.

INTRODUCTION

The Atlantic forest is widely known as a biodiversity hotspot (Myers *et al.* 2000; Mittermeier *et al.* 2005), with only 11.7% of the original forest remaining (Ribeiro *et al.* 2009). The original area of this biome is home of ca. 70% of the Brazilian population (Pinto and Brito 2005), being highly fragmented, with most fragments covering less than 50 ha (Ribeiro *et al.* 2009). The Atlantic forest is probably the most endangered world hotspot (Galindo-Leal *et al.* 2005). Notwithstanding, only 1.62% is protected by conservation units under integral protection (Ribeiro *et al.* 2009).

There are approximately 250 species of mammals in the Atlantic forest, 22% endemic to this biome (Reis *et al.* 2011). Large and medium-sized mammals are particularly sensitive to habitat fragmentation (Negrão and Valladares-Pádua 2006), requiring relatively large areas. Chiarello (1999) points out that smaller fragments of forest in this biome hold considerably lower mammalian richness than larger ones. Therefore, due to the threat of increasing fragmentation of the Atlantic forest, and considering the importance of mammals to ecosystems' processes (Pardini *et al.* 2003), studies of mammalian richness in different fragments are of primary importance for conservation efforts.

This study aims to providing a checklist of large and medium-sized mammals of Estação Ecológica Mata do Cedro (EEMC), a state reserve of Atlantic forest in central Minas Gerais, 130 km from the state capital, Belo Horizonte.

MATERIALS AND METHODS

Study site

"*Estação Ecológica Mata do Cedro*" (hereafter EEMC) is located in the municipalities of Carmópolis de Minas, Itaguara and Cláudio, at coordinates 20°26'47" S, 44°36'38" W (Figure 1). This remnant of Atlantic forest (1,563 ha) is inserted in the São Francisco river basin. The vegetation is classified as "*Floresta Estacional Semidecidual*" (seasonally semi-deciduous forest) sensu IBGE (2004). It has mean altitude of 900 m and annual average temperature of 20°C. The region is highly fragmented, with several anthropogenic landscapes such as farms, pastures and villages. All permits and research licenses were authorized by the Instituto Estadual de Florestas de Minas Gerais - IEF-MG.

Data collection

Like other studies (e. g. Eduardo and Passamani 2009), we adopted the definition of mammal size patterns described by Emmons and Feer (1997), who considered medium-sized mammals as those weighting 2 to 7 kg, and large-sized mammals those weighing more than 7 kg.

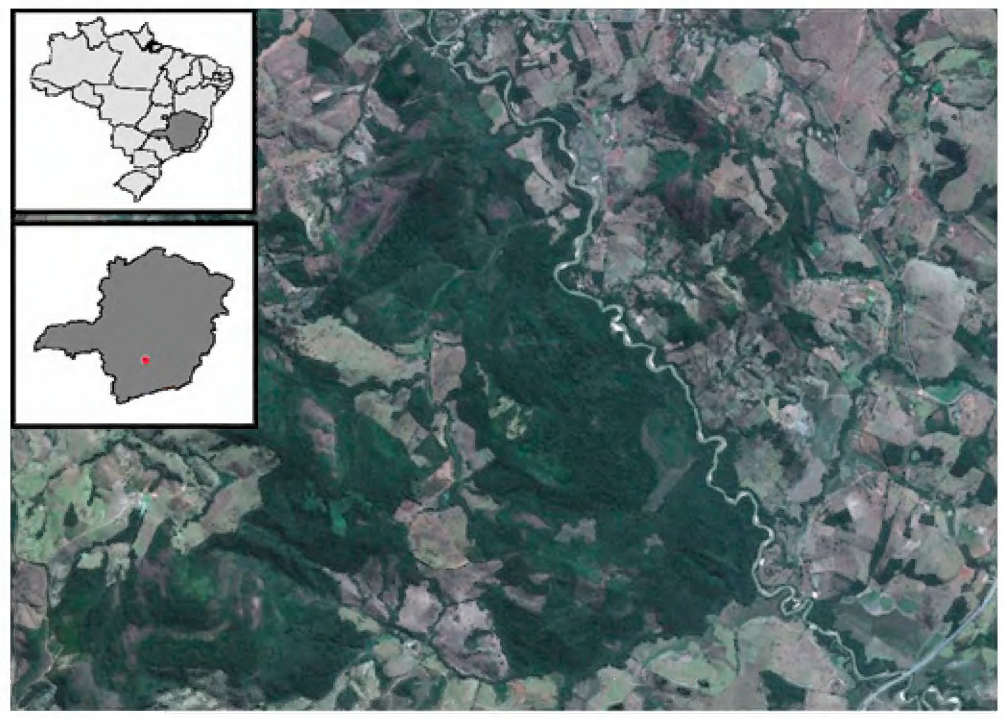

FIGURE 1. Location of the Estação Ecológica Mata do Cedro in Minas Gerais state (upper left, red dot) and a satellite image of the EEMC (GoogleMaps, 2011).

Despite not meeting these criteria, one species (White-eared Opossum, *Didelphis albiventris*) was included in the study inasmuch as it is commonly listed in other studies of medium to large-sized mammals (Scoss *et al.* 2004; Rocha-Mendes *et al.* 2005; Rocha and Dalponte 2006; Negrão and Valladares-Pádua 2006; Eduardo and Passamani 2009). Another species (Black-tufted Marmoset, *Callithrix penicillata*) was included because it could be identified without error and was commonly recorded during the survey.

Between June 2008 and February 2009 three methodologies were applied in order to sample medium and large-sized mammals of EEMC: footprint traps (sand plots), active search for evidences of presence of mammals divided into direct (sighting and hearing) and indirect (tracks, such as footprints, faeces, burrows and other markings) evidence, and camera-trap. We used 80 sand plots, each 50x50 cm. Footprint traps were arranged in four previously existing trails and roads in different areas of the reserve (with 20 traps each, placed at a distance of 20 m between each other), varying from a highly deforested field, to more preserved areas with dense cover and water streams. All traps were baited with banana or bacon. Active search was carried out in the same sand plots trails. Each trail was checked throughout five consecutive days once every two months. Footprints and other signs were identified using Becker and Dalponte (1999) and Borges and Tomás (2008) guides. Two camera traps were installed to aid in the species richness inventory.

For the species accumulation curve and rarefaction curve, each sand-plot verification along with the active search in the same trails constituted a "capture" event, totaling 100 "capture" events. Rarefaction curves were made in the software EstimateS 8.5.0 (Colwell, 2006) with 1,000 randomizations.

We followed Wilson and Reeder (2005) for taxonomic treatment of the results.

Results and discussion

With a total effort of 1.600 sand-plots*day, 14 species were recorded. Through active search, we recorded 14 species (six direct, and eight indirect) and with camera traps, we recorded four species, totaling 21 medium to large-size mammals distributed in 8 orders (Table 1). Active search (direct and indirect) registered five exclusive ones: Lesser Anteater, (*Tamandua tetradactyla*); Black-fronted Titi Monkey (*Callicebus nigrifrons*); Capuchin Monkey, (*Sapajus* sp.) and Coati (*Nasua nasua*) with direct evidence (sighting) and Neotropical River Otter, (*Lontra longicaudis*) with indirect evidence. Camera traps recorded one new species to the survey: the Giant Anteater (*Myrmecophaga tridactyla*) (Figure 2). These results highlight the effectiveness of method complementarities, pointing out the benefits of employing different methods in order to assess the mammalian species richness.

The species accumulation and rarefaction curve (Figure 3) shows a slight sign of leveling off. This suggests that a longer study period with a greater effort is required to assess the actual number of mammalian species at EEMC.

Order Carnivora was the group with most species registered (38% with 8 species), followed by Primates (14% with 3 species). Order Didelphimorphia and Lagomorpha had the smaller species composition, which was expected, given that Lagomorpha has only one species native to Brazil and Didelphimorphia has two species occurring in this region that meet our criteria for inclusion in this list (*D. albiventris* and *D. aurita*). The high presence of order Carnivora is consistent with other studies in the Atlantic forest and in the Cerrado biome that sampled medium to large-size mammals (Chiarello 1999; Negrão and Valladares-Pádua 2006; Modesto *et al.* 2008; Prado *et al.* 2008; Eduardo and Passamani 2009; Pessôa *et al.* 2009; Santos-Filho and Ferreira da Silva 2009; Bocchiglieri *et al.* 2010; Bruna *et al.* 2010). This could be due to a large proportion of this order in the medium and large-size mammals species of Brazil (Fonseca *et al.* 1996) and to the methods applied, generally surveys at or near roads and trails, since some carnivore species have a higher capture rate on roads (Trolle and Kéry 2005).

Species composition registered in this study represents nearly 9% of the total mammalian fauna for the Atlantic forest (250 species) and for Minas Gerais state (243 species) (Drummond *et al.* 2005; Reis *et al.* 2011). However, if we remove the small and volant mammals from those lists, the mammalian composition in EEMC represents a larger proportion of the mammalian fauna described. For instance, Chiarello (1999) registered 37 species of medium and large mammals in several fragments of different sizes in the Atlantic forest. This number, together with other species found in other recent studies (Scoss *et al.* 2004; Paglia *et al.* 2005; Passamani *et al.* 2005; Negrão and Valladares-Pádua 2006; Prado *et al.* 2008; Silva Jr. and Pontes 2008; Eduardo and Passamani 2009; Pessôa *et al.* 2009) indicates that the Atlantic forest currently shelters a minimum of 54 species of medium and large size mammals, 35 of which occur in Minas Gerais state. Our survey registered approximately 40% and 62% of medium and large size mammals of the Atlantic forest and Minas Gerais state respectively.

Two species recorded in the present study, Puma (*Puma concolor*) and Giant Anteater, are cited as VU (vulnerable) in Brazilian red list of endangered species (Machado *et al.* 2008); the latter is included as VU in the IUCN Red list as well (IUCN 2010). The two most common species found in this study were the White-eared Opossum and the Black-tufted-ear Marmoset, which, together with other generalist species, composed the majority of the mammalian fauna registered at EEMC. The high abundance of generalist species, resistant to anthropogenic effects, and the absence of more sensitive species that require large and undisturbed areas (*e.g* Jaguar, *Panthera onca*; Lowland Tapir, *Tapirus terrestris*; Giant Armadillo, *Priodontes maximus*) suggests an elevated degree of perturbation of this Atlantic forest fragment (Negrão and Valladares-Pádua 2006).

The fragmentation process of the Atlantic forest may be driving several species to regional extinction. No recent study in the Atlantic forest of Minas Gerais registered Jaguars or Giant Armadillos and only one registered Lowland Tapirs (Scoss *et al.*, 2004). Although this does not mean that those species no longer occur in this environment, it suggests that they are becoming increasingly rarer. On the other hand, comparison between survey studies in the Atlantic forest of Minas

Gerais showed low species turnover with many common species shared between studies. This might indicate a biotic homogenization (McKinney and Lockwood, 1999) with loss of rare and threatened species and an expansion of a few resistant species.

The record of Black-tufted-ear Marmoset in the sand plots is curious since it is an arboreal animal. However the presence of banana as bait in some sand plots seems to have attracted the Marmoset into the ground, an event that we saw several times during the survey. *Dasyprocta* sp. could not be identified to species level because of the similarities of the tracks, although some assumptions could be made: The study region is close to the overlap zone of *D. azarae* and *D. leporina* near the Espinhaço Mountains. Nevertheless, given that EEMC is west of Espinhaço Mountains, the species most probably recorded in our study was *D. azarae*. Similarly, the capuchin monkey (*Sapajus* sp.) could not be identified to species level. There are two species of *Sapajus* sp. that may probably occur on this site: *S. nigritus* and *S. libidinosus* (Alfaro *et al.* 2011). *S. nigritus* is an Atlantic forest species and *S. libidinosus* occurs in the Cerrado biome. Since our study site is near the Atlantic forest/Cerrado border, it was not possible to define the capuchin monkey to species level.

In comparison with other studies, Eduardo and Passamani (2009) recorded 15 species of mammals in a reserve of 300 ha, with the same three methodologies, although with different effort. Of those, eight species: White-eared Opossum, Nine-banded Armadillo (*Dasypus novemcictus*), Black-fronted Titi Monkey, Crab-eating Fox (*Cerdocyon thous*), Tayra (*Eira Barbara*), Crab-eating Raccoon (*Procyon cancrivorus*), Paca (*Cuniculus paca*), Agouti (*Dasyprocta* sp.) and the Forest Rabbit (*Sylvilagus brasiliensis*) are common for both studies. The present study, however, detected species of larger sizes like puma and red-brocket deer (*Mazama americana*) and Eduardo and Passamani (2009) included two small mammals: Brazilian Guinea Pig, (*Cavia* sp.) and Brazilian Squirrel (*Guerlinguetus ingrami*). Since both sites suffer from anthropogenic disturbances such as illegal logging, hunting and invasion by domestic animals, which can negatively affect mammalian species diversity, the difference for the record of large mammals in our study was probably due to the larger size of our study area, (Chiarello 1999; 2000; Srbeck-Araújo and Chiarello 2008; Oliveira *et al.* 2008).

Scoss *et al.* (2004), working with sand-plots, registered 16 species at "*Parque Estadual do Rio Doce*" – PERD, a reserve of Atlantic forest with ca. 36.000 ha in Minas Gerais. Despite the total size of the reserve, only a small effective area was surveyed (6.4 ha) with an effort of 1.200 sand-plots. In our study, we sampled a smaller reserve with a bigger effort, and registered a similar number of species in the footprint traps, with six different species for this methodology between Scoss *et al.* (2004) and our survey: Margay (*Leopardus wiedii*), Lowland Tapir and Greater Grison (*Galictis vittata*) at PERD; and the Six-banded Armadillo (*Euphractus sexcinctus*), Crab-eating Raccoon and Collared Peccary (*Pecari tajacu*) at EEMC. The Margay is very susceptible to human induced effects (Payan *et al.* 2008) and the Lowland Tapir is generally dependent of forest cover and sensitive to hunting pressure (Naveda *et al.* 2008). These human pressures could have excluded those and others species from EEMC, which has a markedly human presence.

Several others species are expected to be found at EEMC, such as the Brazilian Porcupine (*Coendou prehensilis*), Brown-throated Sloth (*Bradypus variegatus*), Capybara (*Hydrochoerus hydrochaeris)*, Howler Monkeys (*Alouatta* sp.) and Grisons. They were not detected in our study, despite being mentioned in interviews with local inhabitants. However, sand-plots are not designed to register arboreal species like porcupines, sloths and monkeys, and the location of traps and trails surveyed could influence which species might be registered (Capybaras live nearby large sources of water, for instance). Therefore, the absence of records does not indicate that these species are not present in this region (except for Howler Monkeys, which are easy to detect when present because of loud vocalizations, which can be heard from considerable distance).

Hunting, invasion of domestic animals (cattle, dogs) and illegal logging were confirmed during the survey in most of the reserve, indicating high degree of human activities near and inside the area. On the other hand, the considerable diversity of medium and large-sized native mammals, and the presence of vulnerable species such as the Puma and Giant Anteater emphasizes the ecological quality and conservational importance of this reserve. In addition, more studies are required to estimate population parameters of these susceptible species in order to assess the importance of this area for a long-term conservation.

Figure 2. Giant Anteater (*M. tridactyla*) registered in the camera-trap.

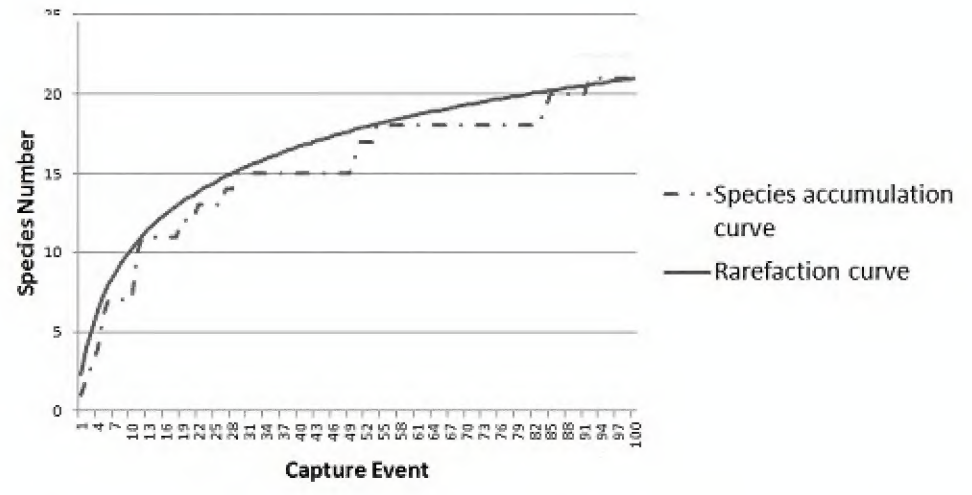

Figure 3. Species accumulation and rarefaction curve of mammals registered at the Estação Ecológica Mata do Cedro.

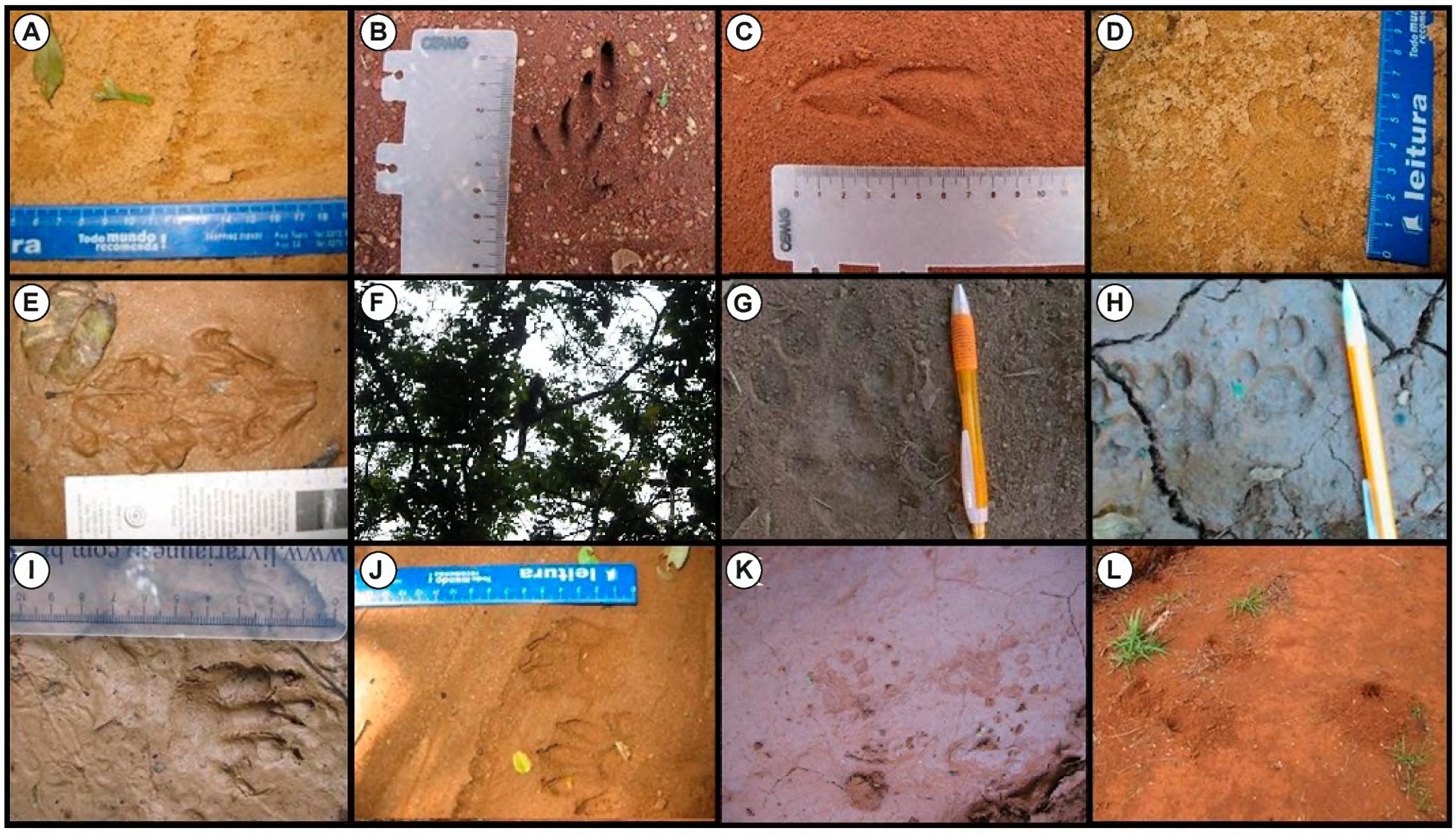

Figure 4. Records of footprints, tracks and individuals of some of the mammals registered at Estação Ecológica Mata do Cedro: (a) Black-tufted Marmoset (*C. penicillata*); (b) Agouti (*Dasyprocta* sp.); (c) Red-brocket Deer (*M. americana*); (d) Tayra (*E. barbara*); (e) Neotropical River Otter (*L. longicaudis*); (f) Capuchin Monkey (*Sapajus* sp.); (g) Puma (*P. concolor*); (h) Oncilla (*L. tigrinus*); (i) Paca (*C. paca*); (j) Crab-eating Raccoon (*P. cancrivorous*); (k) Hog-nosed Skunk (*C. semistriatus*); (l) foraging signs of Coati (*N. nasua*) located at the same place where a group was commonly seen and heard.

Table 1. List of mammals registered in Estação Ecológica Mata do Cedro, Minas Gerais, south-eastern Brazil. The codes for record type are: SP - sand-plots; DE – direct evidence (sightings and hearings); IE – indirect evidence (tracks not from sand-plots); CT – camera traps.

SPECIES RECORDED	ENGLISH NAME	PORTUGUESE NAME	RECORD	THREAT
DIDELPHIMORPHIA				
Family Didelphidae				
Didelphis albiventris Linnaeus, 1758	*White-eared Opossum*	*Gambá de orelha branca*	SP, CT	
PILOSA				
Family Myrmecophagidae				
Myrmecophaga tridactyla Linnaeus, 1758 (Figure 2)	*Giant Anteater*	*Tamanduá-bandeira*	CT	VU
Tamandua tetradactyla Linnaeus, 1758	*Lesser Anteater*	*Tamanduá-mirim*	DE	
CINGULATA				
Family Dasypodidae				
Dasypus novemcinctus Linnaeus, 1758	*Nine-banded Armadillo*	*Tatu-galinha*	SP, IE	
Euphractus sexcinctus Linnaeus, 1758	*Six-banded Armadillo*	*Tatu-peba*	SP	
PRIMATES				
Family Cebidae				
Sapajus sp. Kerr, 1792 (Figure 4)	*Capuchin Monkey*	*Macaco-prego*	DE	
Family Callitrichidae				
Callithrix penicillata E. Geoffroy, 1812 (Figure 4)	*Black-tufted Marmoset*	*Mico-estrela*	SP, DE	
Family Pitheciidae				
Callicebus nigrifrons Spix, 1823	*Black-fronted Titi Monkey*	*Guigó, Sauá*	DE	
LAGOMORPHA				
Family Leporidae				
Sylvilagus brasiliensis Linnaeus, 1758	*Forest Rabbit*	*Tapeti*	DE, CT	
CARNIVORA				
Family Felidae				
Leopardus tigrinus Gray, 1842 (Figure 4)	*Oncilla*	*Gato-do-mato pequeno*	SP, IE	
Puma concolor Linnaeus, 1758 (Figure 4)	*Puma, Cougar*	*Onça-parda, Suçuarana*	SP, IE	VU
Family Canidae				
Cerdocyon thous Linnaeus, 1766	*Crab-eating Fox*	*Cachorro-do-mato*	SP	
Family Mustelidae				
Eira barbara Linnaeus, 1758 (Figure 4)	*Tayra*	*Irara*	SP	

Table 1. ***Continued.***

SPECIES RECORDED	ENGLISH NAME	PORTUGUESE NAME	RECORD	THREAT
Lontra longicaudis Olfers, 1818 (Figure 4)	*Neotropical River Otter*	*Lontra*	IE	
Family Mephitidae				
Conepatus semistriatus Boddaert, 1758 (Figure 4)	*Hog-nosed Skunk*	*Jaritataca*	SP, IE, CT	
Family Procyonidae				
Nasua nasua Linnaeus, 1766 (Figure 4)	*Coati*	*Quati*	DE, IE	
Procyon cancrivorus G. Cuvier, 1798 (Figure 4)	*Crab-eating Racoon*	*Mão-pelada*	SP	
ARTIODACTYLA				
Family Tayassuidae				
Pecari tajacu Linnaeus, 1758	*Collared Peccary*	*Cateto*	SP	
Family Cervidae				
Mazama americana Erxleben, 1777 (Figure 4)	*Red Brocket Deer*	*Veado-mateiro*	SP, IE	
RODENTIA				
Family Dasyproctidae				
Dasyprocta sp. Illiger, 1811 (Figure 4)	*Agouti*	*Cutia*	SP, IE	
Family Cuniculidae				
Cuniculus paca Linnaeus, 1758 (Figure 4)	*Paca*	*Paca*	SP	

Acknowledgments: We would like to thank Maria Aparecida Faleiro and Associação Regional de Proteção e Integração Ambiental – ARPIA for all the logistic and financial support, without which this study wouldn't be possible. Also we are thankful to Universidade Federal de Lavras – UFLA, for the camera-trap equipment provided.

Literature Cited

Alfaro, J.W.L., J.P. Boubli, L.E. Olson, A. Di Fiore, B. Wilson, G.A. Gutierrez-Espeleta, K.L. Chiou, M. Schulte, S. Neitzel, V. Ross, D. Schwochow, M.T.T. Nguyen, I. Farias, C.H. Janson and M.E. Alfaro. 2011. Explosive Pleistocene range expansion leads to widespread Amazonian sympatry between robust and gracile capuchin monkeys. *Journal of Biogeography* 39(2): 272-288.

Becker, M. and J.C. Dalponte. 1999. *Rastros de mamíferos silvestres brasileiros: Um guia de campo.* (2nd ed.). Brasília: UnB. 180 p.

Bocchiglieri, A., A.F. Mendonça and R.P.B. Henriques. 2010. Composição e diversidade de mamíferos de médio e grande porte no Cerrado do Brazil central. *Biota Neotropica* 10(3): 169-176.

Borges, P.A.L. and W.M. Tomás. 2008. *Guia de rastros e outros vestígios de mamíferos do pantanal*. Corumbá: Embrapa Pantanal. 148 p.

Bruna, E.M., J.F. Guimarães, C.T. Lopes, P. Duarte, A.C.L. Gomes, S.C.S. Belentani, R. Pacheco, K.G. Facure, F.G. Lemos and H.L. Vasconcelos. 2010. Mammalia, Estação Ecológica do Panga, a Cerrado protected area in Minas Gerais state, Brazil. *Check List* 6(4): 668-675.

Chiarello, A.G. 1999. Effects of fragmentation of the Atlantic forest on mammals communities in south-eastern Brazil. *Biological Conservation* 89(1): 71-82.

Chiarello, A.G. 2000. Density and populations size of mammals in remants of Brazilian Atlantic forest. *Conservation Biology* 14(6): 1649-1657.

Cowell, R.K. 2006. *EstimateS: Statistical estimation of species richness and shared species from samples.* Electronic database accessible at http://purl.ocl.org/estimates. Captured on December 2011.

Drummond, G.M., C.S. Martins, A.B.M. Machado, F.A. Sebaio and Y. Antonini. 2005. *Biodiversidade em Minas Gerais: Um atlas para sua conservação*. Belo Horizonte: Fundação Biodiversitas. 222p.

Eduardo, A.A. and M. Passamani. 2009. Mammals of medium and large size in Santa rita do Sapucaí, Minas Gerais, southeastern Brazil. *Check List* 5(3): 399-404.

Emmons, L.H. and F. Feer. 1997. *Neotropical Rainforest Mammals*. Chicago: University of Chicago Press. 380 p.

Fonseca, G.A.B., G.L. Herrmann, Y.L.R. Leite, R.A. Mittermeier, A.B. Rylands and J.L. Patton. 1996. Lista anotada dos mamíferos do Brasil. *Occasional Papers in Conservation Biology* 4: 1-38.

Galindo-Leal C., T.R. Jacobsen, P.F. Langhammer and S. Olivieri. 2005. Estado dos hotspots: a dinâmica da perda da biodiversidade; p. 12-23 *In* C. Galindo-Leal and I.G. Câmara (ed). *Mata Atlântica: biodiversidade, ameaças e perspectivas*. São Paulo: SOS Mata Atlântica – Belo Horizonte: Conservação Internacional.

Instituto Brasileiro de Geografia e Estatística. 2004. *Mapa de Vegetação do Brasil*. Electronic Database accessible at ftp://ftp.ibge.gov.br/Cartas_e_Mapas/Mapas_Murais/. Ministério do Planejamento, Orçamento e Gestão, Instituto Brasileiro de Geografia e Estatística, Diretoria de Geociências, Brasil. Captured on May 2011.

IUCN 2010. IUCN *Red List of Threatened Species. Version 2010.4*. Electronic Database accessible at http://www.iucnredlist.org/. Captured on 30 May 2011.

Machado, A., G.M. Drummond and A.P. Paglia. 2008. *Livro vermelho da fauna brasileira ameaçada de extinção*. Brasília: Ministério do Meio Ambiente. 1420 p.

Mittermeier, R.A., P.R. Gil, M. Hoffmann, J. Pilgrin, T. Brooks, C.G. Mittermeier, J. Lamoreux, and G.A.B. Fonseca. 2005. *Hotspots revisited. Earth's biologically richest and most endangered terrestrial ecoregions*. Sierra Madre: Cemex. 392 p.

Modesto, C.T., F.S. Pessôa, T. Jordão-Nogueira, M.C. Enrici, L.M. Costa, N. Attias, J. Almeida, D.S.L. Raíces, H.G. Albuquerque, B.C. Pereira, C.E.L. Esbérard. and H.G. Bergallo. 2008. Mammals, Serra da Concórdia, state of Rio de Janeiro, Brazil. *Check List* 4(3): 341-348.

Myers, N., R.A., Mittermeier, C.G. Mittermeier, G.A.B. Fonseca and J. Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403: 853-858.

Naveda, A., B. de Thoisy, C. Richard-Hansen, D.A. Torres, L. Salas, R. Wallance, S. Chalukian, and S. de Bustos. 2008. *Tapirus terrestris. In* IUCN 2011. *IUCN Red List of Threatened Species. Version 2011.2*. Eletronic database accessible at http://www.iucnredlist.org/. Captured on 08 december 2011.

Negrão, M.F.F. and C. Valladares-Pádua. 2006. Registros de mamíferos de maior porte na Reserva Florestal do Morro Grande, São Paulo. *Biota Neotropica* 6(2): 1-13.

Oliveira, V.B., A.M. Linares, G.L.C. Corrêa, and A.G. Chiarello. 2008. Predation on the black capuchin monkey *Cebus nigritus* (Primates: Cebidae) by domestic dogs *Canis lupus familiaris* (Carnivora: Canidae), in the Parque Estadual Serra do Brigadeiro, Minas Gerais, Brazil. *Revista Brasileira de Zoologia* 25(2): 376-378.

Pardini, R., E.H. Ditt, L. Cullen Jr., C. Bassi and R. Rudran. 2003. Levantamento rápido de mamíferos terrestres de médio e grande porte; p. 181-201 *In* L. Cullen Jr., R. Rudran and C. Valladares-Pádua (ed.). *Métodos de estudos em biologia da conservação & manejo da vida silvestre*. (2nd ed.). Curitiba: UFPR.

Passamani, M., J. Dalmaschio and S.A. Lopes. 2005. Mamíferos não-voadores em áreas com predomínio de Mata Atlântica da Samarco Mineração S.A., município de Anchieta, Espírito Santo. *Biotemas* 18(1): 135-149.

Paglia, A.P., M.O.G.Lopes, F.A. Perini and H.M. Cunha. 2005. Mammals of the Estação de Preservação e Desenvolvimento Ambiental de Peti (EPDA-Peti), São Gonçalo do Rio Abaixo, Minas Gerais, Brazil. *Lundiana* 6: 89-96.

Payan, E., E. Eizirik, T. Oliveira, R. Leite-Pitman, M. Kelly. and C. Valderrama. 2008. *Leopardus wiedii*. *In* IUCN 2011. *IUCN Red List of Threatened Species. Version 2011.2*. Eletronic database accessible at http://www.iucnredlist.org/. Captured on 08 December 2011.

Pessôa, F.S., T.C. Modesto, H.G. Albuquerque, N. Attias, and H. Bergallo. 2009. Non-volant mammals, Reserva Particular do Patrimônio Natural (RPPN) Rio das Pedras, municipality of Mangaratiba, state of Rio de Janeiro, Brazil. *Check List* 5(3) 577-586.

Pinto, L.P. and M.C.W. Brito. 2005. Dinâmica da perda da biodiversidade na Mata Atlântica brasileira: uma introdução; p. 27-30 *In* C. Galindo-Leal and I.G. Câmara (Ed.). *Mata Atlântica: biodiversidade, ameaças e perspectivas*. São Paulo: SOS Mata Atlântica – Belo Horizonte: Conservação Internacional.

Prado, M.R., Rocha, E.C. and Lessa G.M. 2008. Mamíferos de médio e grande porte em um fragmento de Mata Atlântica, Minas Gerais, Brasil. *Revista Árvore* 32(4): 741-749.

Reis, N.R., A.L. Peracchi, W.A. Pedro and I.P. Lima. 2011. *Mamíferos do Brasil*. (2nd ed.). Londrina: Nélio R. dos Reis. 439 p.

Ribeiro, M.C., J.P. Metzger, A.C. Martensen, F.J. Ponzoni and M.M. Hirota. 2009. The brazilian Atlantic forest: How much is left, and how is the remaing forest distributed? Implications for conservation. *Biological Conservation* 142(6): 1141-1153.

Rocha, E.C. and J. Dalponte. 2006. Composição e caracterização da fauna de mamíferos de médio e grande porte em uma pequena reserva de Cerrado em Mato Grosso, Brasil. *Revista Arvore* 30(4): 669-678.

Rocha-Mendes, F., S.B. Mikich, G.V. Bianconi, and W.A. Pedro. 2005. Mamíferos do município de Fênix, Paraná, Brasil: etnozoologia e conservação. *Revista Brasileira de Zoologia* 22(4): 991-1002.

Scoss, L.M., P.M. Júnior, E. Silva and S.V. Martins. 2004. Uso de parcelas de areia para o monitoramento de impacto de estradas sobre a riqueza de espécies de mamíferos. *Revista Árvore* 28(1): 121-127.

Santos-Filho, M. and M.N.F. Silva. 2002. Uso de habitats por mamíferos em área de Cerrado do Brasil Central: um estudo com armadilhas fotográficas. *Zoociências* 4(1): 57-73.

Silva Jr., A.P. and A.R.M. Pontes. 2008. The effect of a mega-fragmentation process on large mammal assemblages in the highly-threatened Pernambuco Endemism Centre, north-eastern Brazil. *Biodiversity Conservation* 17: 1455-1464.

Srbeck-Araújo, A.C. and A.G. Chiarello. 2008. Domestic dogs in Atlantic forest reserves of south- eastern Brazil: a camera-trapping study on patterns of entrance and site occupancy rates. *Brazilian Journal of Biology* 68(4): 771-779.

Trolle M. and M. Kéry. 2005. Camera-trap study of ocelot and other secretive mammals in the northern Pantanal. *Mammalia* 68(3-4): 405-412.

Wilson, D. E., and D. M. Reeder (Eds.). 2005. *Mammal species of the world: a taxonomic and geographic reference*. 3rd ed. Baltimore: Johns Hopkins University Press.

Received: September 2011
Accepted: June 2012
Published online: August 2012
Editorial responsibility: Maria Luisa Jorge